## In the claims:

Please amend the claims as follows:

1. (Currently Amended) A method for manufacturing a semiconductor device comprising the steps of:

forming a semiconductor film over a substrate;

cleaning a surface of a semiconductor film; and

applying a laser beam to the cleaned surface of said

semiconductor film to form a crystalline semiconductor film in a nitrogen atmosphere.

- 2. (Original) A method according to claim 1, wherein said cleaning is performed by using HF aqueous solution or an aqueous solution containing HF and  $H_2O_2$ .
- 3. (Original) A method according to claim 1, wherein said laser beam has an energy density of 100 to 500 mJ/cm<sup>2</sup>.
  - 4. (Currently Amended) A method for manufacturing a semiconductor device comprising the steps of:

A3

forming a semiconductor film over a substrate; cleaning a surface of said semiconductor film; preheating said semiconductor film to form an oxide film;

and

applying a laser beam to said semiconductor film through

said oxide film to form a crystalline semiconductor film in a nitrogen atmosphere.

- 5. (Original) A method according to claim 4, wherein said cleaning is performed by using HF aqueous solution or an aqueous solution containing HF and  $H_2O_2$ .
- 6. (Original) A method according to claim 4, wherein said laser beam has an energy density of 100 to 500  $mJ/cm^2$ .
- 7. (Currently Amended) A method for manufacturing a semiconductor device comprising the steps of:

forming a semiconductor film over a substrate;

cleaning a surface of said semiconductor film;

preheating said semiconductor film in an atmosphere

containing oxygen and nitrogen to form an oxide film; and

applying a laser beam to said semiconductor film through

said oxide film to form a crystalline semiconductor film in a

nitrogen atmosphere.

8. (Original) A method according to claim 7, wherein said cleaning is performed by using HF aqueous solution or an aqueous solution containing HF and  $\rm H_2O_2$ .



conted

- 9. (Original) A method according to claim 7, wherein said laser beam has an energy density of 100 to 500 mJ/cm<sup>2</sup>.
- 10. (Currently Amended) A method for manufacturing a semiconductor device comprising the steps of:

KT

forming a semiconductor film over a substrate; cleaning a surface of said semiconductor film; preheating said semiconductor film to form an oxide film on

applying a laser beam to said semiconductor film through said oxide film to form a crystalline semiconductor film in a nitrogen atmosphere.

a surface of said semiconductor film; and

48

- 11. (Original) A method according to claim 10, wherein said cleaning is performed by using HF aqueous solution or an aqueous solution containing HF and  $\rm H_2O_2$ .
- 12. (Original) A method according to claim 10, wherein said laser beam has an energy density of 100 to 500 mJ/cm<sup>2</sup>.
- 13. (Currently Amended) A method for manufacturing a semiconductor device comprising the steps of:

  forming a crystalline semiconductor film over a substrate;



cleaning a surface of said crystalline semiconductor film; and

Control

applying a laser beam to the cleaned surface of said crystalline semiconductor film to improve crystallinity of said crystalline semiconductor film in a nitrogen atmosphere.

- 14. (Original) A method according to claim 13, wherein said cleaning is performed by using HF aqueous solution or an aqueous solution containing HF and  $\rm H_2O_2$ .
- 15. (Original) A method according to claim 13, wherein said laser beam has an energy density of 100 to 500 mJ/cm<sup>2</sup>.
- 16. (Currently Amended) A method for manufacturing a semiconductor device comprising the steps of:

All

forming a crystalline semiconductor film over a substrate; cleaning a surface of said crystalline semiconductor film; preheating said crystalline semiconductor film to form an oxide film; and

applying a laser beam to said crystalline semiconductor film through said oxide film to improve crystallinity of said crystalline semiconductor film in a nitrogen atmosphere.



A13

- 17. (Original) A method according to claim 16, wherein said cleaning is performed by using HF aqueous solution or an aqueous solution containing HF and  $H_2O_2$ .
- 18. (Original) A method according to claim 16, wherein said laser beam has an energy density of 100 to 500 mJ/cm<sup>2</sup>.
- 19. (Currently Amended) A method for manufacturing a semiconductor device comprising the steps of:

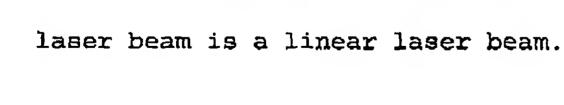
forming a semiconductor film over a substrate;

cleaning a surface of said semiconductor film;

forming an oxide film on a surface of said semiconductor

film; and

applying a laser beam to said semiconductor film through said oxide film to form a crystalline semiconductor film in the air.



21. (Original) A method according to claim 19, wherein said laser beam has an energy density of 100 to 500 mJ/cm<sup>2</sup>.

20. (Original) A method according to claim 19, wherein said

Control

- 22. (Original) A method according to claim 19, wherein said oxide film has a thickness of 20-400.
- 23. (Currently Amended) A method for manufacturing a semiconductor device comprising the steps of:

forming a semiconductor film over a substrate;

A15

cleaning a surface of said semiconductor film by using HF aqueous solution or an aqueous solution containing HF and  $H_2O_2$ ;

forming an oxide film on a surface of said semiconductor film; and

applying a laser beam to said semiconductor film through said oxide film to form a crystalline semiconductor film in the air.

- 24. (Original) A method according to claim 23, wherein said laser beam is a linear laser beam.
- 25. (Original) A method according to claim 23, wherein said laser beam has an energy density of 100 to 500 mJ/cm<sup>2</sup>.
  - 26. (Original) A method according to claim 23, wherein said oxide film has a thickness of 20-400.